

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(only for new nonprovisional applications under 37 CFR 1.53(b))

| | |
|------------------------|--|
| Attorney Docket No. | 1875.138000F |
| First Inventor | Ralph Duncan |
| Title | An Integrated VCO Having an Improved Tuning Range over Process and Temperature Variations (as amended) |
| Express Mail Label No. | |

APPLICATION ELEMENTS
See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 211]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the invention
 - Brief Summary of the invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 94]
5. Oath or Declaration [Total Pages 3]
 - a. ☐ Newly executed (original or copy)
 - b. ☒ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76.

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program
(Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies



ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Authorization under 37 C.F.R. § 1.136(a)(3)
☒ Other: The name of the assignee is: Broadcom Corporation

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☒ Continuation ☐ Divisional ☐ Continuation-in-Part (CIP) of prior application No: 10/171,762
Prior application information: Examiner Mis, David C. Art Unit: 2817

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☒ Customer Number **26111** or ☐ Correspondence address below

| | | | | | |
|---------|---|-----------|----------------|----------|----------------|
| NAME | STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. | | | | |
| | Attorneys at Law | | | | |
| ADDRESS | 1100 New York Avenue, N.W. | | | | |
| CITY | Washington | STATE | D.C. | ZIP CODE | 20005-3934 |
| COUNTRY | U.S.A. | TELEPHONE | (202) 371-2600 | FAX | (202) 371-2540 |

| | | | |
|-------------------|--------------------|-----------------------------------|---------|
| NAME (Print/Type) | Jeffrey T. Helvey | Registration No. (Attorney/Agent) | 44,757 |
| SIGNATURE | <i>Jeff Helvey</i> | Date | 9/22/03 |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

09/22/03
13408 U.S. P.

FEE TRANSMITTAL

for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Complete if Known

| | |
|----------------------|------------------|
| Application Number | (to be assigned) |
| Filing Date | Herewith |
| First Named Inventor | Ralph Duncan |
| Examiner Name | (to be assigned) |
| Art Unit | (to be assigned) |
| Attorney Docket No. | 1875.138000F |

TOTAL AMOUNT OF PAYMENT (\$ 750.00)

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☒ Other** ☐ None
** Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.

☐ Deposit Account
Deposit Account Number 19-0036

Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any over payments
☐ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description | Fee Paid |
|----------|----------|----------|----------|------------------------|----------|
| 1001 | 750 | 2001 | 375 | Utility filing fee | \$750.00 |
| 1002 | 330 | 2002 | 165 | Design filing fee | |
| 1003 | 520 | 2003 | 260 | Plant filing fee | |
| 1004 | 750 | 2004 | 375 | Reissue filing fee | |
| 1105 | 160 | 2005 | 80 | Provisional filing fee | |

SUBTOTAL (1) (\$) 750.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Extra | Fee from below | Fee Paid |
|---|----------------|----------|
| Total Claims 10 - 20** = 0 X \$18.00 = \$0.00 | | |
| Indep. Claims 2- 3** = 0 X \$84.00 = \$0.00 | | |
| Multiple Dependent | \$280.00 | \$0.00 |

| Large Entity Fee Code | Large Entity Fee (\$) | Small Entity Fee Code | Small Entity Fee (\$) | Fee Description |
|-----------------------|-----------------------|-----------------------|-----------------------|---|
| 1202 | 18 | 2202 | 9 | Claims in excess of 20 |
| 1201 | 84 | 2201 | 42 | Independent claims in excess of 3 |
| 1203 | 280 | 2203 | 140 | Multiple dependent claim, if not paid |
| 1204 | 84 | 2204 | 42 | **Reissue independent claims over original patent |
| 1205 | 18 | 2205 | 9 | **Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$) 0.00

**or number previously paid, if greater; For Reissue, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description | Fee Paid |
|----------|----------|----------|----------|--|----------|
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1502 | 50 | 2052 | 25 | Surcharge-late provisional filing fee or cover sheet | |
| 1053 | 130 | 1053 | 130 | Non-English specification | |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for ex parte reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1252 | 410 | 2252 | 205 | Extension for reply within second month | |
| 1253 | 930 | 2253 | 465 | Extension for reply within third month | |
| 1254 | 1,450 | 2254 | 725 | Extension for reply within fourth month | |
| 1255 | 1,970 | 2255 | 985 | Extension for reply within fifth month | |
| 1401 | 320 | 2401 | 160 | Notice of Appeal | |
| 1402 | 320 | 2402 | 160 | Filing a brief in support of an appeal | |
| 1403 | 280 | 2403 | 140 | Request for oral hearing | |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable | |
| 1453 | 1,300 | 2453 | 650 | Petition to revive - unintentional | |
| 1501 | 1,300 | 2501 | 650 | Utility issue fee (or reissue) | |
| 1502 | 470 | 2502 | 235 | Design issue fee | |
| 1503 | 630 | 2503 | 315 | Plant issue fee | |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 | 750 | 2809 | 375 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 | 750 | 2810 | 375 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1801 | 750 | 2801 | 375 | Request for Continued Examination (RCE) | |
| 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | |

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

Complete (if applicable)

| | | | | | |
|-------------------|--|-----------------------------------|---------|-----------|--------------|
| Name (Print/Type) | Jeffrey T. Helvey Attorney for Applicants | Registration No. (Attorney/Agent) | 44,757 | Telephone | 202-371-2600 |
| Signature | <i>Jeff Helvey</i> | Date | 9/22/03 | | |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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*Admitted only in Virginia
*Admitted only in Texas
*Practice Limited to
Federal Agencies

September 22, 2003

WRITER'S DIRECT NUMBER:

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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop Patent Application

Re: U.S. Continuation Utility Patent Application under 37 C.F.R. § 1.53(b)
(claiming priority to U.S. Patent Appl. No. 10/171,762; filed: June 17, 2002)
Appl. No. (to be assigned); Filed: Herewith
For: **An Integrated VCO Having an Improved Tuning Range over Process
and Temperature Variations (as amended)**
Inventors: Ralph Duncan *et al.*
Our Ref: 1875.138000F

Sir:

The following documents are forwarded herewith for appropriate action by the U.S.
Patent and Trademark Office:

1. PTO Fee Transmittal (Form PTO/SB/17);
2. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
3. U.S. Continuation Utility Patent Application entitled:

**An Integrated VCO Having an Improved Tuning Range over Process and
Temperature Variations (as amended)**

and naming as inventors:

Ralph Duncan
Tom W. Kwan

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);
 - b. A copy of the executed Supplemental Declaration, as originally filed in U.S. Appl. No. 09/580,014 ;
 - c. A specification containing:
 - i. 204 pages of description prior to the claims;
 - ii. 6 pages of claims (21 claims);
 - iii. a one (1) page abstract; and
 - d. 94 sheets of drawings: (Figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24A, 24B, 24C, 25, 26, 27, 28A, 28B, 28C, 28D, 28E, 28F, 28G, 28H, 28I, 28J, 28K, 29, 30, 31A, 31B, 31C, 31D, 31E, 31F, 31G, 31H, 31I, 31J, 31K, 31L, 31M, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44A, 44B, 45A, 45B, 45C, 45D, 45E, 45F, 45G, 45H, 45I, 45J, 45K, 46A, 46B, 47A, 47B, 47C, 47D, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69A, 69B, 69C, 69D, 69E, 70, 71, 72, 73, 74, 75, 76, 77, 78A, 78B, 78C and 79, 80);
4. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3);
 5. A Preliminary Amendment;
 6. An Information Disclosure Statement (IDS);
 7. Form PTO-1449 (3 pages);
 8. Two (2) return postcards; and
 9. PTO-2038 Credit Card Payment Form for \$ 750.00 to cover:

\$ 750.00 Filing fee for patent application.

Commissioner for Patents
September 22, 2003
Page 3

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey T. Helvey
Attorney for Applicants
Registration No. 44,757

JTH/agj
::ODMA\MHODMA\SKGF_DC1;179978;1
SKGF Rev. 2/12/02 dcw; 9/5/02 mac; 4/29/03 svb

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Ralph Duncan *et al.*

Appl. No. (to be assigned)

Filed: Herewith

For: **An Integrated VCO Having an
Improved Tuning Range over
Process and Temperature
Variations** (as amended)

Confirmation No. (to be assigned)

Art Unit: (to be assigned)

Examiner: (to be assigned)

Atty. Docket: 1875.138000F

**Authorization To Treat A Reply As Incorporating An Extension Of
Time Under 37 C.F.R. § 1.136(a)(3)**

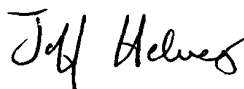
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey T. Helvey
Attorney for Applicants
Registration No. 44,757

Date: 9/22/03
1100 New York Avenue, N.W.
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JTH/agj
::ODMA\MHODMA\SKGF_DC1;177615;1

SKGF 1/25/02 mac; 4/18/03 svb